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ABSTRACT

Wisconsin was one of the first states to establish statutory requirements for teaching about natural resources and conservation. This paper describes some recent developments and initiatives that have been undertaken in Wisconsin since 1980. A new teacher certification rule was officially promulgated in October 1983, and went into effect on July 1, 1985. It requires that candidates seeking teacher certification in the areas of early childhood, elementary, agriculture, science, and social studies education be able to demonstrate competency in four areas of content (natural resources conservation, energy, ecological principles, and people-environment interactions) and also in three areas of methodology. A Guide to Curriculum Planning Environmental Education was published in 1986, and offers a rationale for environmental education. The guide includes the philosophy, goals, and objectives of environmental education, and identifies the kinds of objectives appropriate for different grade levels. It is intended that this guide will be used by schools in meeting a new school district standard, requiring a curriculum plan for environmental education, which goes into effect in 1988-89. New standards for teachers of high school environmental studies are also discussed. (TW)

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Recent Wisconsin Initiatives in Environmental Education

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RECENT WISCONSIN INITIATIVES IN ENVIRONMENTAL EDUCATION*

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Wisconsin was one of the first states to establish statutory requirements for teaching about natural resources and their conservation. In the mid-1930s, "elements of agriculture and conservation of natural resources," were made part of the "fundamental course" of every public elementary school. Every high school was required to "provide instruction in... conservation of natural resources." Other statutes were created which required "adequate instruction in the conservation of natural resources" of all candidates for licenses to teach courses in science or social studies.

The teacher certification requirement remains in the Wisconsin Statutes in its original form but its impact has been modified by the promulgation of an administrative rule. The elementary and high school requirements were subsumed in a 1985 statute dealing with educational goals. In this statute school boards are required to provide an instructional program which helps students gain a basic body of knowledge that includes "information and concepts in...natural sciences, including knowledge of the elements of agriculture and the conservation of natural resources,..." This unfortunate attachment of the conservation of natural resources to the natural sciences

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occurred wth little or no publicity and an effort is underway to amend the statute involved. Hopefully the new language will use the term environmental education and stress the infusion of environmental content into all subject areas at all grade levels, with the greatest emphasis in instructional programs in art, health, science, and social studies.

Since 1980, several initiatives have been undertaken which have greatly strengthened environmental education in Wisconsin. They include: (1) the promulgation of an environmental education requirement for about 2/3 of all teachers applying for initial certification; (2) the development of an environmental education curriculum planning guide; (3) the creation of a school district standard requiring environmental education curriculum planning; and (4) the creation of standards for secondary level teacher preparation programs in environmental studies.

TEACHER PREPARATION

A teacher certification rule was officially promulgated by State Superintendent Herbert J. Grover on October 13, 1983. It requires that candidates seeking certification in the areas of early childhood, elementary, agriculture, science, and social studies education after July 1, 1985 be able to demonstrate competency in four areas of content and three areas of methodology:

- natural resource conservation;
- ecological principles;
- energy in physical and biological systems;
- people-environment interactions including
  - a historical review of such interactions
  - human population growth problems
  - natural resource management
  - impacts of technology
  - effects on physical and mental health;
- techniques for using affective education methods to examine attitudes and values inherent in environmental problems;
- the infusion of environmental content into the curriculum, stressing methodologies such as:
  - outdoor teaching
  - simulations
  - case studies
  - community resource use
  - issue investigation;
- techniques for teaching about citizen participation in the resolution of environmental issues and problems.

THE CURRICULUM PLANNING GUIDE

The development of a new publication, A Guide to Curriculum Planning in Environmental Education, was initiated in response to a recommendation contained in From Ought to Action in Environmental Education: A Report on the National

Leadership Conference on Environmental Education.

This recommendation read as follows:

> Recommendation 15: The Tbilisi goals and objectives of environmental education should be further clarified for use by teachers; mechanisms for achieving these goals should be identified to encourage environmental educators to utilize the environment in its totality and in all curriculum areas.

Work on the curriculum planning guide began in 1979, but was delayed by the effort to enact the new teacher certification rule. In September 1983, State Superintendent Herbert J. Grover appointed a task force to continue development of the guide.

The new guide is not a traditional curriculum guide, but a curriculum planning guide. It offers a rationale for environmental education, a suggested philosophy, a goal, five categories of environmental education objectives, and identifies the kinds of objectives appropriate for different grade levels. There are also sections dealing with environmental content, values education and the environment, and approaches to teaching and learning. The guide emphasizes the infusion of environmental content into all subject areas at all grade levels. Curriculum planners are aided by sections dealing with the work of a local

environmental education curriculum committee, current issues in environmental education, and numerous appendices.

The characteristics of programs recommended by the guide include:

Holistic	--	dealing with the natural, built, technological, social, economic, political, cultural, moral, and aesthetic aspects of the environment;
Continuous	--	part of all subject areas at all grade levels;
Interdisciplinary	--	drawing content from all disciplines;
Issue-oriented	--	dealing with issues having local, statewide, national, and international perspectives;
Globally-oriented	--	considering Earth as a single ecosystem;
Future-oriented	--	concerned about future as well as present generations;
Experientially-oriented	--	utilizing a diverse array of learning approaches and environments; and
Action-oriented	--	involving students in the resolution of real environmental issues and problems;

Neutral -- approaching issues and problems without bias, with the classroom considered to be a forum where all points of views can be heard.

THE CURRICULUM PLANNING REQUIREMENT

The new curriculum planning requirement is part of a new school district standard which reads as follows:

> Develop a written sequential curriculum plan that includes language arts...environmental education...and music. The plan shall specify objectives, course content and resources, and shall include a program evaluation method.

An administrative rule interpreting this and several other school district standards directs the following approach in implementing programs to meet this standard:

> Environmental education objectives and activities shall be integrated into the kindergarten through Grade 12 curriculum plans of all subject areas, with the greatest emphasis in the plans for art, health, science, and social studies education.

This standard and its associated administrative rule will go into effect with the 1988-89 school year. A 20% stratified sample of school district will be audited on site each year. Districts judged not to be in compliance with this and/or other standards will be penalized 25% of

their state financial aids.

ENVIRONMENTAL STUDIES CERTIFICATION

Although A Guide to Curriculum Planning in Environmental Education promotes the infusion of environmental content into all subject areas, it does not preclude high school environmental education courses if they meet certain criteria. They should:

- be elective and offered to students in their junior or senior year;
- not supplant or inhibit the infusion of environmental content into subject area curricula for the junior or senior year;
- stress the kinds of objectives recommended for these grade levels - skills, participation, and attitudes;
- have a definite issue orientation, with specific issues to be studied identified by students and teachers working together; and include the study of at least one international, one national, one statewide, and one local issue;
- use both secondary and primary sources of information in the study of these issues; and
- be taught by an interdisciplinary team.

As the result of an other administrative rule, promulgated in the summer of 1986, teachers of such courses must be graduates of an approved preparation program which requires study:

- to develop an understanding of natural resources and their management;
- to develop knowledge of ecological principles and their application to the solution of environmental issues and problems;
- to develop an understanding of energy in physical and biological systems, and the environmental consequences of energy use;
- of the history and philosophy of interactions between people and the environment;
- of the implications of continued growth of the human population;
- of how people/environment interactions affect physical and mental heatlh;
- to develop the ability to plan and implement curricula utilizing cognitive and affective education methods in the study of environmental issues;
- of ways in which citizens can actively participate in the resolution of environmental issues and problems, and how such strategies can be incorporated into curricula and instruction; and
- to develop the ability to incorporate environmental content into traditional subject areas.

The development and implementation of these initiatives has depended and will continue to depend on the willingness

of educators to heed the advice given by Aldo Leopold in discussing the resolution of environmental issues and problems:

> The usual answer to this dilemma is "more conservation education." No one will debate this, but is it certain that only the volume of education needs stepping up? Is something lacking in the content as well?

Educators in Wisconsin are attempting to increase the volume of environmental education, but even more importantly, to develop its content to prepare citizens who must deal with the problems of the 1980s and beyond. The teacher certification rule, publication of the new curriculum planning guide, the curriculum planning requirement, and the new secondary environmental studies certification standards are designed to help them do just that.

REFERENCES

Engleson, D.C. A Guide to Curriculum Planning in Environmental Education. Madison: Wisconsin Department of Public Instruction, 1985

Grover, H.J. Statutes of Wisconsin Relating to Elementary and Secondary Schools. Madison: Wisconsin Department of Public Instruction, 1985

Grover, H.J. Wisconsin Administrative Code: Rules of the Department of Public Instruction. Wisconsin Department of Public Instruction, 1986

Leopold, A. The Land Ethic. Sand County Almanac With Essays on Conservation from Round River. New York: Ballantine Books, 1966

Stapp, W.B. From Ought to Action in Environmental Education: A Report on the National Leadership on Environmental Education. Columbus: SMEAC Information Reference Center, The Ohio State University, 1978

UNESCO-UNEP. The Tbilisi Declaration. CONNECT, 1978 III: 1-3